

Claim 20. The apparatus of claim 1 wherein said at least one input heat transfer element is a rectangular fin.

Claim 21. The apparatus of claim 1 wherein said at least one input heat transfer element is coated with a heat conductive material.

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Claim 22. An apparatus for rapidly changing the temperature of a mass of product, comprising:
a plurality of input heat transfer elements for insertion within the mass of product, the input heat transfer elements being fins having first and second major fin surface areas, the fin surface areas of said input heat transfer elements being generally parallel;
a plurality of output heat transfer elements in thermal contact with the plurality of input heat transfer elements and an ambient temperature environment to transfer thermal energy between the product mass and ambient temperature environment, the output heat transfer elements being fins having first and second major fin surface areas, the fin surface areas of said output heat transfer elements being generally parallel each other and generally parallel the fin surface areas of the input heat transfer elements.

Claim 23. An apparatus for rapidly changing the temperature of a mass of product, comprising:
a plurality of input heat transfer elements for insertion within the mass of product;
a plurality of output heat transfer elements in thermal contact with the plurality of input heat transfer elements and to an ambient temperature environment to transfer thermal energy between the product mass and ambient temperature environment, the input and output heat transfer elements formed of an single extruded body of aluminum.

REMARKS